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2621				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

09/929,110

**Applicant(s)**

HAINO ET AL.

**Examiner**

NIGAR CHOWDHURY

**Art Unit**

2621

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16, 22 and 23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16, 22 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 12/03/2008 have been fully considered but they are not persuasive.
2. In re pages 8-10, applicant argues that Okada discloses originally VOB includes VOB#1, VOB#2....and after the deletion of certain VOBUs the areas originally occupied by these VOBUs are freed. Ando discloses the navigation data corresponds to the control information. The navigation data is used to record, reproduce, or edit an AV stream. The navigation data contains all the necessary navigation data including a single management information file. Nozaki discloses "When reservation recording is complete, the .....reservation must be performed before that". Kikuchi discloses control information in a lower layer of audio/video data area corresponds to video manager information and video title set information in terms of its function. Okada, Ando, Nozaki, and Kikuchi fails to disclose the generating of the tentative control information where the tentative control information is used for forming the managing control information that is to be recorded later, as recited in claim 1.

In response, the examiner respectfully disagrees. Ando discloses from col. 7 lines 62-col. 8 lines 3 that "....order in which computer data and audio & video data are recorded and the recording information size of them are arbitrary...." Ando discloses data which are recorded in the recording medium can be recorded freely anywhere. It does not have any fixed area to store.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4, 7, 10, 12, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6148140 by Tomoyuki Okada in view of US 6,341,196 by Ando et al.

3. Regarding **claim 1**, Okada teaches an apparatus for recording information in a recordable recording medium (See Fig. 17) in conformity to a recording format (See Col. 76 line 37-42), the recording format defining unit recording information (See Col. 34 line 61-65) and first managing control information (fig. 4A, 12, 70, col. 14 lines 34-39, col. 77 lines 12-col. 78 lines 56), the unit recording information including recording information and reproduction control information, the apparatus comprising:

- A first recording device (See Fig. 17, Col. 34 line 51) for recording unit recording (See Col. 34 line 61-65) information in recordable recording medium;
- A generating device (See Fig. 17, Col. 34 line 50-55) for, generating tentative control information corresponding to the recorded unit recording information, wherein tentative control information is used for forming managing control information (fig. 6, col. 14 lines 34-39, col. 17 lines 65-

col. 18 lines 40, col. 23 lines 60-col. 24 lines 45, col. 77 lines 12-col. 78 lines 56);

- A second recording device (See fig. 17, col. 34 line 51) for recording generated tentative control information (VOB) in recordable recording medium (See Col. 14 line 14-17).

Okada fails to disclose after unit recording information is recorded, tentative control information to be recorded later

Ando discloses after unit recording information is recorded, tentative control information to be recorded later (fig. 3, col. 7 lines 62-col. 8 lines 3, fig. 23, col. 30 lines 28-col. 31 lines 36)

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the proposed combination of Okada's system to include tentative control information, as taught by Ando, after unit recording information for the advantage of providing more flexibility to record data in any area.

4. Regarding **claim 4**, Okada discloses the apparatus further comprising a third recording device (See Fig. 17 (70)) for recording (See Fig. 17 (1, 2, 7, 3)) first managing control information by using recorded tentative control information when the recording of recording information is terminated (See Fig. 84, Col.94 line 12-67, Col. 95 line 1-8).

5. Regarding **claim 7**, Okada teaches a method for recording information in a recordable recording medium (See fig. 17) in conformity to a recording format (See col.

76 line 37-42), the recording format defining unit recording information (See col. 34 line 61-65) and managing control information (fig. 4A, 12, 70, col. 14 lines 34-39, col. 77 lines 12-col. 78 lines 56), the unit recording information including recording information and reproduction control information, the method comprising:

- A first recording process (See fig. 17, col. 34 line 51) for recording unit recording (See col. 34 line 61-65) information in recordable recording medium;
- A generating process (See Fig. 17, Col. 34 line 50-55) for, generating tentative control information corresponding to the recorded unit recording information wherein tentative control information is used for forming managing control information (fig. 6, col. 14 lines 34-39, col. 17 lines 65-col. 18 lines 40, col. 23 lines 60-col. 24 lines 45, col. 77 lines 12-col. 78 lines 56);
- A second recording process (See Fig. 17, Col. 34 line 51) for recording generated control information in recordable recording medium (See Col. 14 line 14-17).

Okada fails to disclose after unit recording information is recorded, tentative control information to be recorded later

Ando discloses after unit recording information is recorded, tentative control information to be recorded later (fig. 3, col. 7 lines 62-col. 8 lines 3, fig. 23, col. 30 lines 28-col. 31 lines 36)

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the proposed combination of Okada's system to include tentative control information, as taught by Ando, after unit recording information for the advantage of providing more flexibility to record data in any area.

6. Regarding **claim 10**, Okada discloses the method further comprising a third recording process (See Fig. 17 (70)) for recording (See Fig. 17 (1, 2, 7, 3)) first managing control information by using recorded tentative control information when the recording of recording information is terminated (See Fig. 84, Col.94 line 12-67, Col. 95 line 1-8).

7. Regarding **claim 12**, Okada shows an information recording medium in which a recording control program is recorded capable of being read by a recording computer (See Fig. 17 (1), Col. 1 line 13) an apparatus for recording information in a recordable recording medium (See Fig. 17) in conformity to a recording format (See Col. 76 line 37-42), the recording format defining unit recording information (See col. 34 line 61-65) and first managing control information (fig. 4A, 12, 70, col. 14 lines 34-39, col. 77 lines 12-col. 78 lines 56), the unit recording information including recording information and reproduction control information, the recording control program causing the recording computer to function as:

- A first recording device (See Fig. 17, Col. 34 line 51) for recording unit recording (See Col. 34 line 61-65) information in recordable recording medium;
- A generating process (See Fig. 17, Col. 34 line 50-55) for, generating tentative control information corresponding to the recorded unit recording information wherein tentative control information is used for forming managing control information (fig. 6, col. 14 lines 34-39, col. 17 lines 65-col. 18 lines 40, col. 23 lines 60-col. 24 lines 45, col. 77 lines 12-col. 78 lines 56);
- A second recording device (See Fig. 17, Col. 34 line 51) for recording generated tentative control information in recordable recording medium (See Col. 14 line 14-17).

Okada fails to disclose after unit recording information is recorded, tentative control information to be recorded later

Ando discloses after unit recording information is recorded, tentative control information to be recorded later (fig. 3, col. 7 lines 62-col. 8 lines 3, fig. 23, col. 30 lines 28-col. 31 lines 36)

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the proposed combination of Okada's system to include tentative control information, as taught by Ando, after unit recording information for the advantage of providing more flexibility to record data in any area.



8. Regarding **claim 15**, the recording control program causes the recording computer to further function as a third recording device (See Fig. 17 (70)) for recording (See Fig. 17 (1, 2, 7, 3)) managing control information by using recorded tentative control information when the recording of recording information is terminated (See Fig. 84, Col.94 line 12-67, Col. 95 line 1-8).

9. Claim 2, 3, 5, 8, 9, 11, 13, 14, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6148140 to Tomoyuki Okada and US 6,341,196 by Ando et al. in view of U.S. Patent No. 6501727 to Mitsuyuki Nozaki.

10. Regarding **Claim 2**, Okada teaches a first recording device which records the recording information and second recording device which records tentative control information. Ando teaches first area including tentatively recorded video manager information. Okada and Ando fail to teach recording of reproduction control information after recording information is recorded; second managing control information is recorded between recording information and reproduction control information.

Nozaki teaches (in Col. 9 line 58-62) after recording information is recorded in a first recording device, records reproduction control information corresponding to the recording information in an area on recordable recording medium, and also area detected ahead of the recording information (See Col. 1 line 62-64); second managing control information is recorded in an area located between the area in which recording information is recorded and the area in which reproduction control information is

recorded (See Col. 6 line 25-28. Nozaki said information can be recorded in any order so it could be the order applicant claimed).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have recording of reproduction control information after recording information is recorded and second managing control information is recorded between recording information and reproduction control information for having more flexibility to control reproduction.

11. Regarding **Claim 3**, an editorial device is disclosed in Tomoyuki Okada (See Col. 1 line 11-15) for carrying out the editorial processing to change the reproduction content of recording information which has been already recorded in recordable recording medium (See Col. 3 line 64-67, Col. 4 line 1-18).

- Generating device is disclosed in Tomoyuki Okada (See Fig. 17 (1, 2, 7, 3)) newly generates tentative control information corresponding to the content of recording information after the editorial processing; and
- Second recording device is disclosed in Tomoyuki Okada (Fig. 17 (70)) records newly generated tentative control information in a vacant area on recordable recording medium (See Col. 14 line 34-39).

12. Regarding **claim 5**, Okada teaches the apparatus wherein managing control information is recorded in an area on recordable recording medium (fig. 4A, 12, 70, col. 14 lines 34-39, col. 77 lines 12-col. 78 lines 56). Ando teaches first area including

tentatively recorded video manager information. Okada and Ando fail to teach the area detected ahead of the unit recording information. Nozaki teaches (in Col. 9 line 58-62) area is reserved before recording. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a area reservation before records the recording information in the recording medium.

13. **Claim 8** Okada teaches a first recording process which records the recording information and second managing control information. Ando teaches first area including tentatively recorded video manager information. Okada and Ando fail to teach reproduction control information which records after recording information is recorded; tentative control information which records between recording information and reproduction control information.

Nozaki teaches (in Col. 9 line 58-62) after recording information is recorded in a first recording process, records reproduction control information corresponding to the recording information in an area on recordable recording medium, and also area detected ahead of the recording information (See Col. 1 line 62-64); second managing control information is recorded in an area located between the area in which recording information is recorded and the area in which reproduction control information is recorded (See Col. 6 line 25-28. Nozaki said information can be recorded in any order so it could be the order applicant claimed).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have recording of reproduction control information

after recording information is recorded and second managing control information is recorded between recording information and reproduction control information for having more flexibility to control reproduction.

14. Regarding **Claim 9**, an editorial process is disclosed in Tomoyuki Okada (See Col. 1 line 11-15) for carrying out the editorial processing to change the reproduction content of recording information which has been already recorded in recordable recording medium (See Col. 3 line 64-67, Col. 4 line 1-18).

- First generating process is disclosed in Tomoyuki Okada (See Fig. 17 (1, 2, 7, 3)) newly generates tentative control information corresponding to the content of recording information after the editorial processing; and
- Second recording process is disclosed in Tomoyuki Okada (Fig. 17 (70)) records newly generated tentative control information in a vacant area on recordable recording medium (See Col. 14 line 34-39).

15. Regarding **claim 11**, Okada teaches managing control information in an area on recordable recording medium. Ando teaches first area including tentatively recorded video manager information. Okada fails to teach the area detected ahead of the unit recording information. Nozaki teaches (in Col. 9 line 58-62) area is reserved before recording. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have an area reservation before records the recording information in the recording medium.

16. Regarding **Claim 13**, Okada teaches a first recording device which records the recording information and second managing control information. Ando teaches first area including tentatively recorded video manager information. Okada fails to teach recording of reproduction control information after recording information is recorded; tentative control information is recorded between recording information and reproduction control information.

Nozaki teaches (in Col. 9 line 58-62) after recording information is recorded in a first recording device, records reproduction control information corresponding to the recording information in an area on recordable recording medium, and also area detected ahead of the recording information (See Col. 1 line 62-64); tentative control information is recorded in an area located between the area in which recording information is recorded and the area in which reproduction control information is recorded (See Col. 6 line 25-28. Nozaki said information can be recorded in any order so it could be the order applicant claimed).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have recording of reproduction control information after recording information is recorded and tentative control information is recorded between recording information and reproduction control information for having more flexibility to control reproduction.

17. Regarding **Claim 14**, the recording control program causes the recording computer (See Fig. 17 (1), Col. 1 line 13) to further function as an editorial device is

disclosed in Tomoyuki Okada (See Col. 1 line 11-15) for carrying out the editorial processing to change the reproduction content of recording information which has been already recorded in recordable recording medium (See Col. 3 line 64-67, Col. 4 line 1-18).

- First generating device is disclosed in Tomoyuki Okada (See Fig. 17 (1, 2, 7, 3)) newly generates tentative control information corresponding to the content of recording information after the editorial processing; and
- Second recording device is disclosed in Tomoyuki Okada (Fig. 17 (70)) records newly generated tentative control information in a vacant area on recordable recording medium (See Col. 14 line 34-39).

18. In **claim 16**, Okada teaches managing control information in an area on recordable recording medium. Ando teaches first area including tentatively recorded video manager information. Okada fails to teach the area detected ahead of the unit recording information. Nozaki teaches (in Col. 9 line 58-62) area is reserved before recording. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a area reservation before records the recording information in the recording medium.

19. Claims 6, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6148140 by Tomoyuki Okada, US 6,341,196 by Ando et al. and

U.S. Patent No. 6501727 to Mitsuyuki Nozaki, in view of U.S. Patent No. 6553180 to Shinichi Kikuchi.

20. Regarding **claim 6**, Okada teaches managing control information in an area on recordable recording medium. Ando teaches first area including tentatively recorded video manager information. Nozaki teaches recording format based on a DVD video standard (Col. 1 line 32), recordable recording medium is a DVD-R (Col. 6 line3). Okada, Ando and Nozaki fail to teach VTSI and VMGI. Kikuchi teaches VTSI (video title set information) in Fig. 4Col. 11 line 17-19. Kikuchi also teaches VMGI in Fig 5, Col. 12 line35-38, Col. 49 line 66, 67, Col. 50 line 1, 2.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have VTSI for controlling the video title set menu video object set and all the title data in VTS and VMGI for controlling the video manager menu video object set and all video title set.

21. Claim 22 is rejected for the same reason as discussed in the corresponding claim 6 above

22. Claim 23 is rejected for the same reason as discussed in the corresponding claim 6 above

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIGAR CHOWDHURY whose telephone number is (571)272-8890. The examiner can normally be reached on 9 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NC  
03/27/2009

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